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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/863,324	05/24/2001	Mitsunori Maruyama		1377

30132 7590 09/08/2003

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EXAMINER

CHANG, VICTOR S

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 09/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Office Action Summary</p>	<p>Application No.</p> <p>09/863,324</p>	<p>Applicant(s)</p> <p>MARUYAMA ET AL.</p>	
	<p>Examiner</p> <p>Victor S Chang</p>	<p>Art Unit</p> <p>1771</p>	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8 and 9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,8 and 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Examiner has carefully considered Applicant's amendments and remarks filed on 6/23/2003. Applicant's amendments to the Specification and claims 1-6, 8, 9, and cancellation of claims 7 and 10-12 have all been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Rejections not maintained are withdrawn.
4. Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application. See MPEP § 704.11(a).

In response to this requirement, please provide a copy of each of the following items of art referred to in the Specification, but not submitted:

Japanese Utility Model Publication No.6-20601

Japanese Patent Un-examined Publication No. 63-132097

Response to Amendment

5. Claims 1-6, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art either individually, or in view of Mori et al. (US 5051295).

It is noted that Applicants appear to have admitted that a protective film transfer sheet comprising a releasing sheet, a resin layer cured by exposure to UV or electron

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beam and an adhesive layer consisting of an ionizing radiation curable resin formed on the releasing surface of the releasing sheet in this order is known art (Japanese Patent Un-examined Publication No. 63-132097) (Specification, page 2, first full paragraph).

For newly amended claim 1, it now recites in part "the adhesive layer contains an ionizing radiation curable resin and a heat-reactive resin". The Examiner notes that, even in the absence of a copy of JP '097, Applicants appear to have admitted that JP '097 teaches essentially the same invention as the instantly claimed invention, and a curable resin and/or monomer, such as 2-hydroxyethyl (meth)acrylate which is both ionizing radiation curable and heat-reactive, is old and well known. As such, it is believed that an adhesive layer, which contains an ionizing radiation curable resin and a heat-reactive resin, is either inherently disclosed by JP '097, or an obvious optimization to one of ordinary skill in the art, motivated by the desire to enhance the adhesion at the interface. Alternatively, Mori's invention is directed to a protective film for photo masks. Mori expressly teaches that the curable compound may be any compound which is cured by irradiation with actinic energy rays such as ultraviolet ray, etc. (column 2, lines 33-37). Examples of curable compounds include curable photopolymerizable monomers, photopolymerizable prepolymers, etc. These may be used alone or in combinations of two or more (column 2, lines 38-44). The curable group may be polymerized by heating or irradiation with ultraviolet ray or electron ray (column 2, lines 55-57). Especially preferred are copolymers of 2-hydroxyethyl methacrylate and 2-hydroxyethyl acrylate (column 3, lines 31-32), and they also inherently contain a heat-reactive functional group, as admitted by Applicant's Specification (page 12, line 14).

As such, it would have been obvious to one of ordinary skill in the art to incorporate Mori's teaching into the protective film transfer sheet of JP '097, motivated by the desire to obtain a suitable adhesiveness. As to the product-by-process recitation in claim 1, the Examiner notes that the method limitations have not been shown on the record to produce a patentably distinct article, as such the formed articles are rendered *prima facie* obvious.

For claim 2, it is noted that although Mori does not expressly teach the ratio of the heat-reactive resin to the ionizing radiation curable resin, it is noted that curable resin or monomer such as 2-hydroxyethyl (meth)acrylate inherently reads on the ratio as claimed.

For claims 3-4 and 6, Mori teaches that examples of the photopolymerizable prepolymers include prepolymers containing at least one acryloyl group (column 4, lines 29-31), and it would have been obvious to incorporate monomers such as 2-hydroxyethyl (meth)acrylate, as set forth above.

For claim 5, Mori expressly teaches that the photopolymerizable prepolymers include melamine acrylate (column 4, lines 29-31). As such, it would have been obvious to incorporate a monomer with a heat-reactive N-methylol functional group.

For claims 8 and 9, although in the absence of a copy of JP '097, it is noted that JP '097 teaches essentially the same invention as the instantly claimed invention, as such it is believed that it is believed that a suitable thickness is either inherently disclosed, or an obvious optimization to one of ordinary skill in the art, motivated by the desire to obtain a suitable adhesiveness.

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6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S Chang whose telephone number is 703-605-4296. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H Morris can be reached on 703-308-2414. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

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VSC

DANIEL ZIRKER
PRIMARY EXAMINER
GROUP 1900-
1700

Daniel Zinker